



**ACRE**

Accountability and Curriculum Reform Effort  
in Response to *A Framework For Change*

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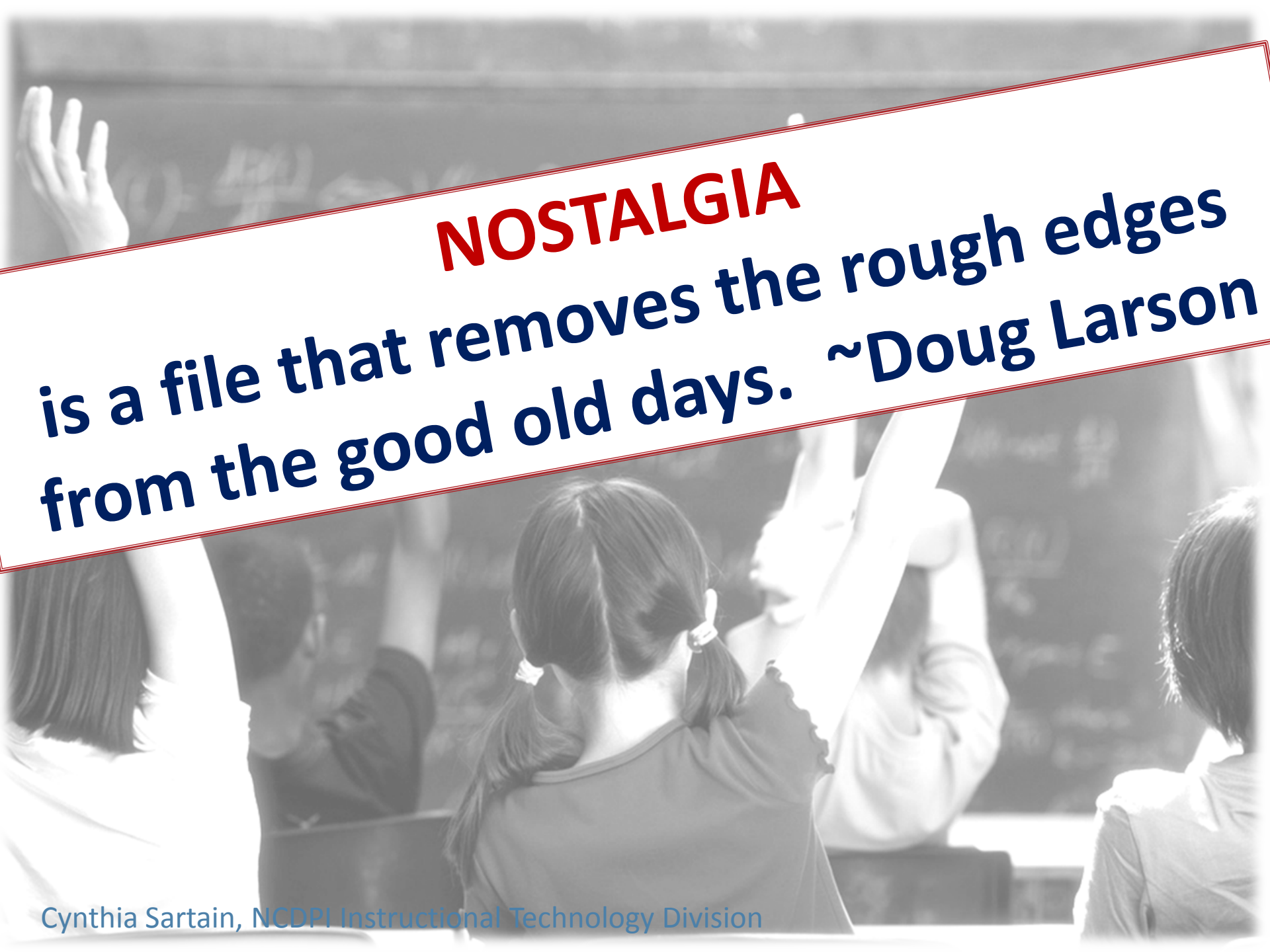
# Information & Technology Skills Essential Standards

NCDPI

Instructional Technology

Cynthia Sartain, Region 3 Consultant

Please use <http://todaysmeet.com/ITES-NRM>  
to share feedback and questions.



# **NOSTALGIA**

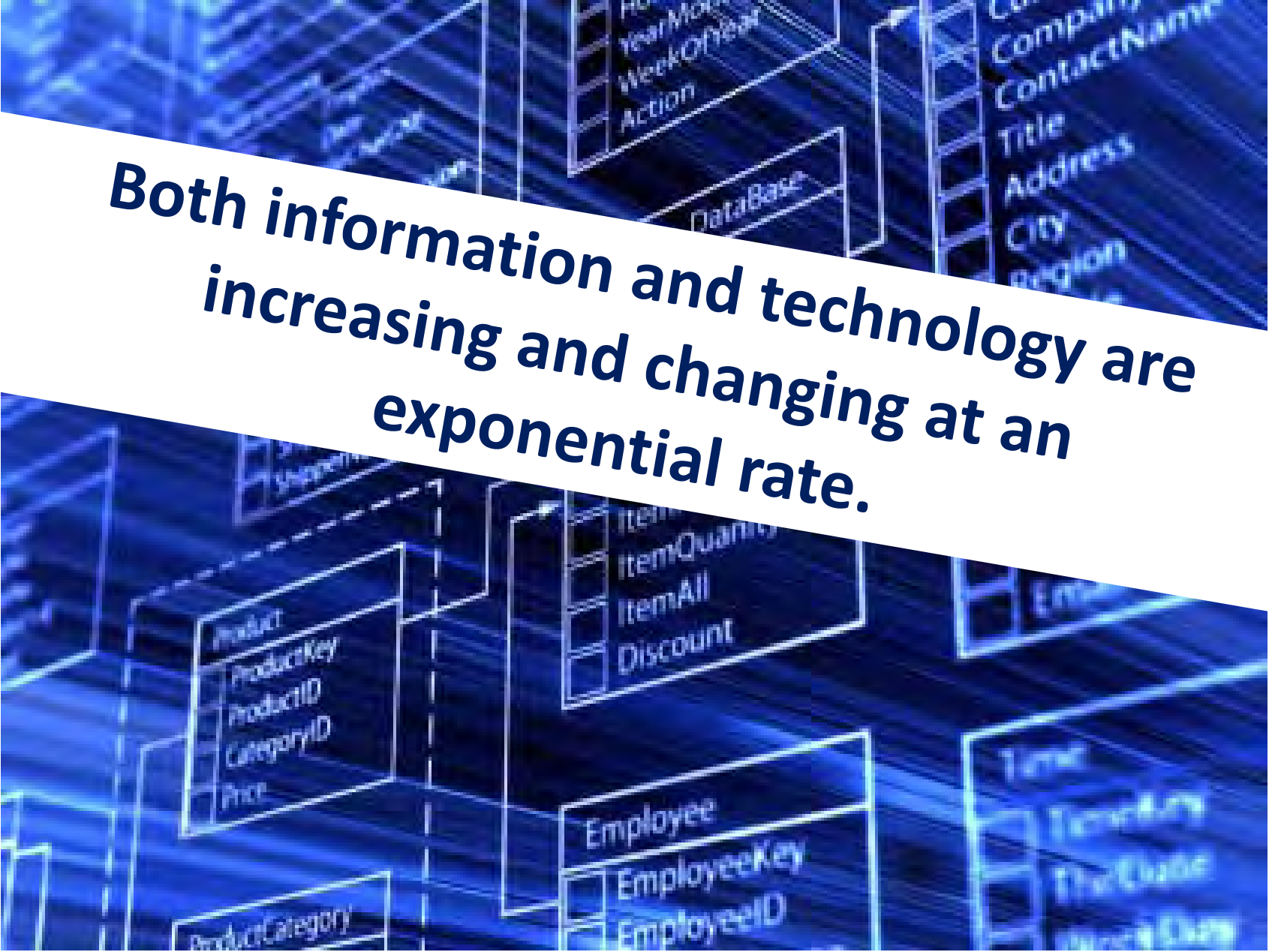
**is a file that removes the rough edges  
from the good old days. ~Doug Larson**



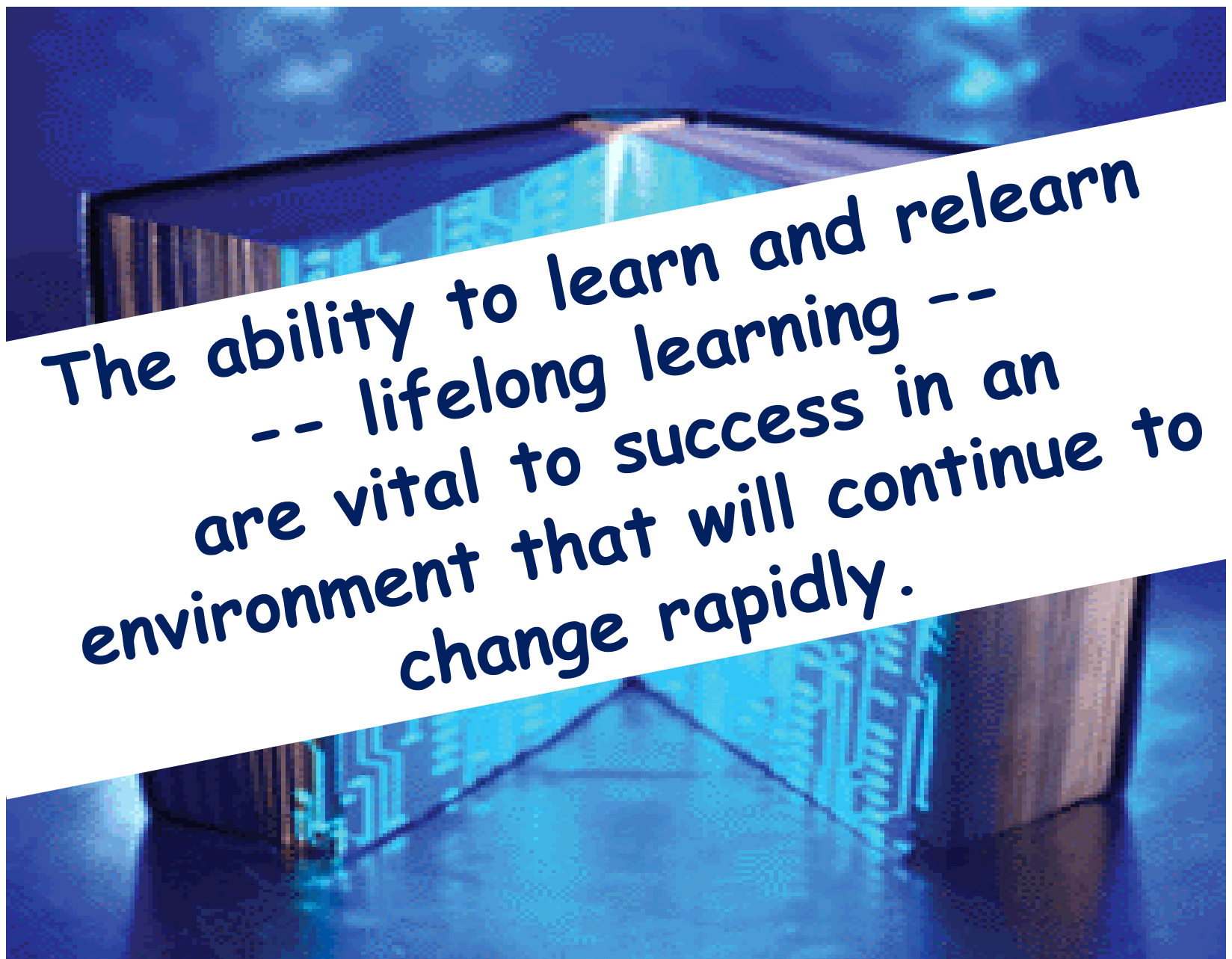
**We've shifted from an industrial economy  
to an information economy, driven  
increasingly by technology.**



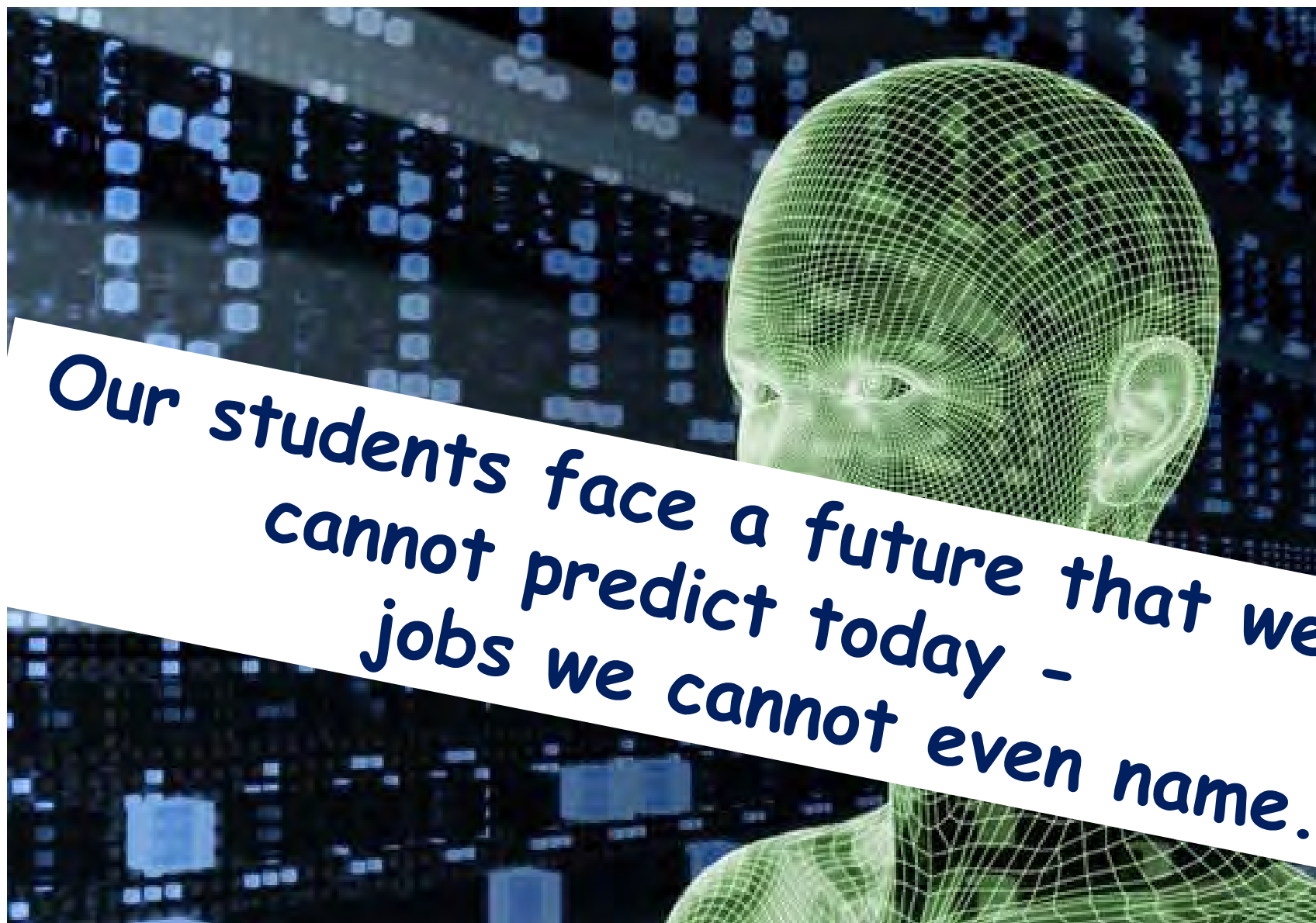




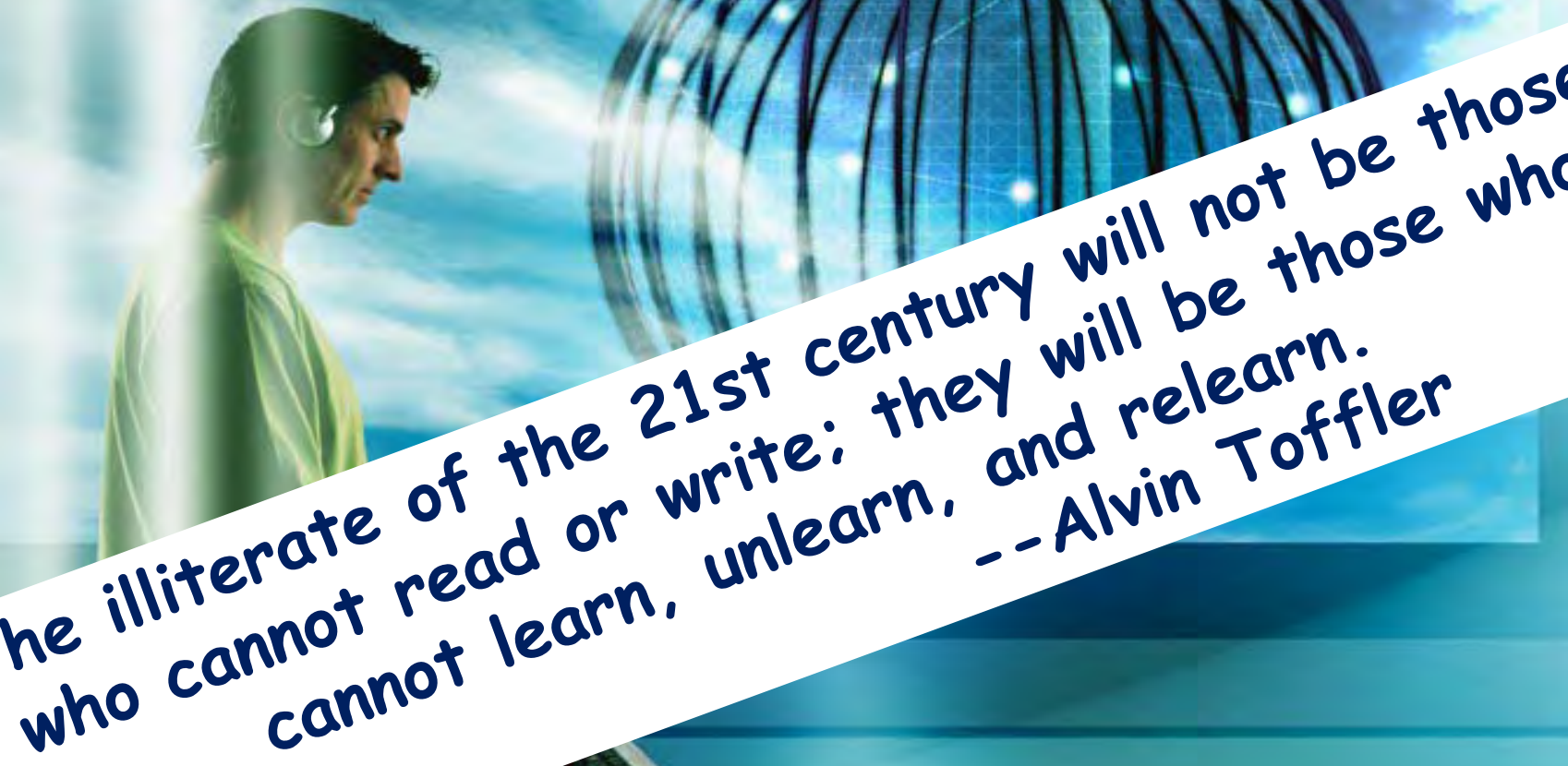
**Both information and technology are increasing and changing at an exponential rate.**



The ability to learn and relearn  
-- lifelong learning --  
are vital to success in an  
environment that will continue to  
change rapidly.



***Our students face a future that we  
cannot predict today -  
jobs we cannot even name.***

A man in profile, wearing a headset, is looking towards a large, glowing wireframe sphere that resembles a globe or a complex network. The background is a bright blue sky with soft clouds. The entire image has a futuristic, technological feel.

**The illiterate of the 21st century will not be those  
who cannot read or write; they will be those who  
cannot learn, unlearn, and relearn.  
-- Alvin Toffler**

# Today ....

**Why** are the new *Information and Technology Essential Standards* **important** for North Carolina students and teachers?

**What** are the new *Information and Technology Essential Standards* and **how do they relate** to other areas of the curriculum?

**How** are the new *Information and Technology Essential Standards* **aligned** with the **North Carolina Professional Teaching Standards**?

**How** do North Carolina teachers **prepare** to teach these new *Essential Standards*?

**How** will North Carolina teachers ensure that students **use 21st century tools and processes** in order to engage in 21st century content? How will you help prepare them?





Follow me!

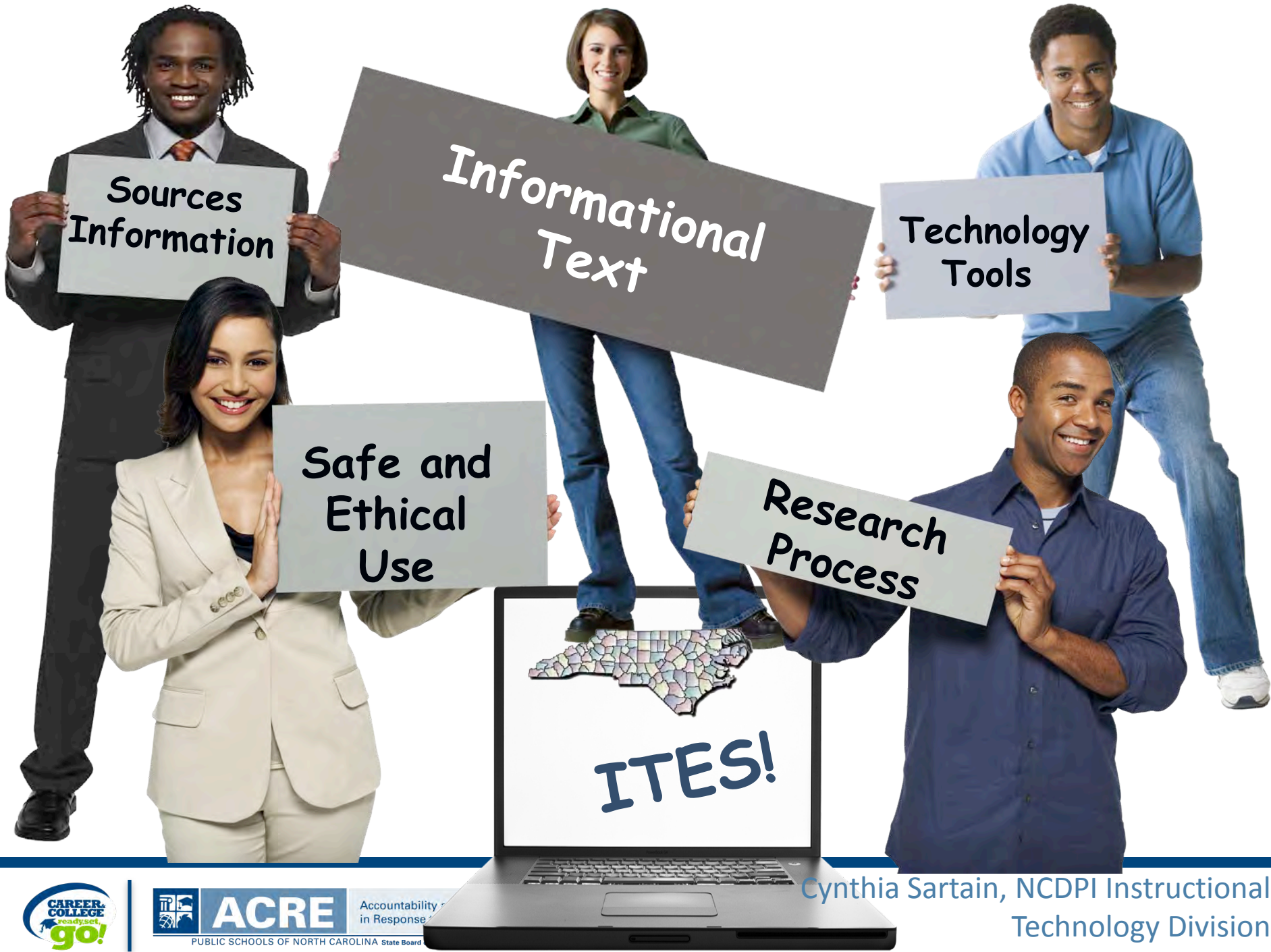


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Sources  
Information

Informational  
Text

Technology  
Tools

Safe and  
Ethical  
Use

Research  
Process



ITES!



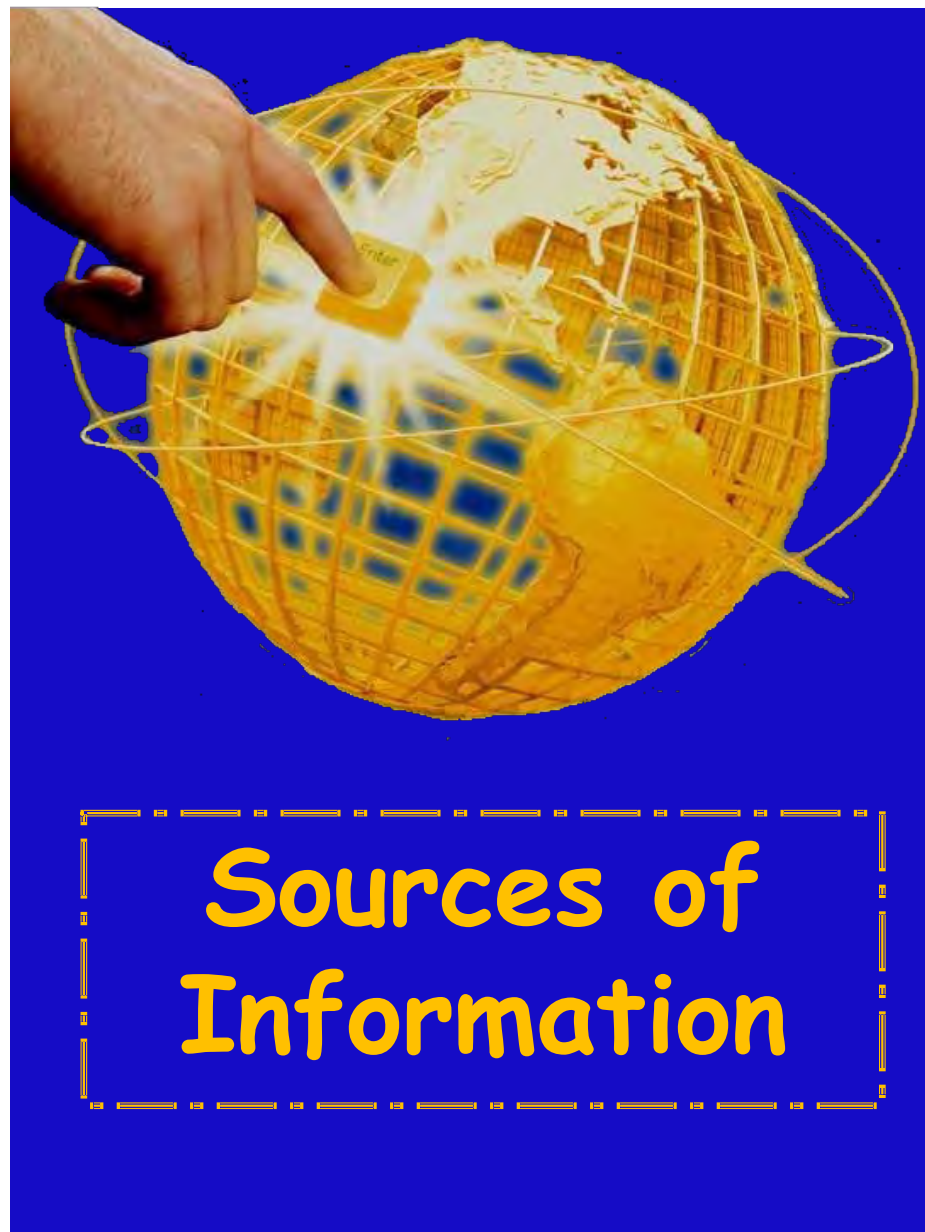
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**Classify and Recall useful **SI**.**

**Categorize **SI** as; appropriate and inappropriate and for specific purposes.**

**Apply criteria to determine appropriate **SI** for specific topics and purposes.**

**Analyze **SI** to determine their reliability.**

**Evaluate **SI** based on specified criteria.**

**Evaluate **SI** needed to solve a given problem.**





# Informational Text

Understand the difference between **IT** read for enjoyment and text read for information.

Apply strategies that are appropriate when reading **IT** for enjoyment and for information.

Analyze appropriate strategies when reading **IT** for enjoyment and for information.





# Research Process



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Understand the importance of good questions in the **RP**.

Remember the steps of a simple (or simplified) **RP**.

Apply the **RP** by participating in whole-class research.

Apply a **RP** as part of collaborative and individual research

Apply a **RP** to complete given tasks.

Apply a **RP** to complete project-based activities.

Design project-based products that address global problems.





# Safe

A woman with dark hair, wearing a beige blazer and pantsuit, is smiling and holding a grey rectangular sign with the letters 'SE' in red. She is standing against a white background.

SE



# Ethical Use



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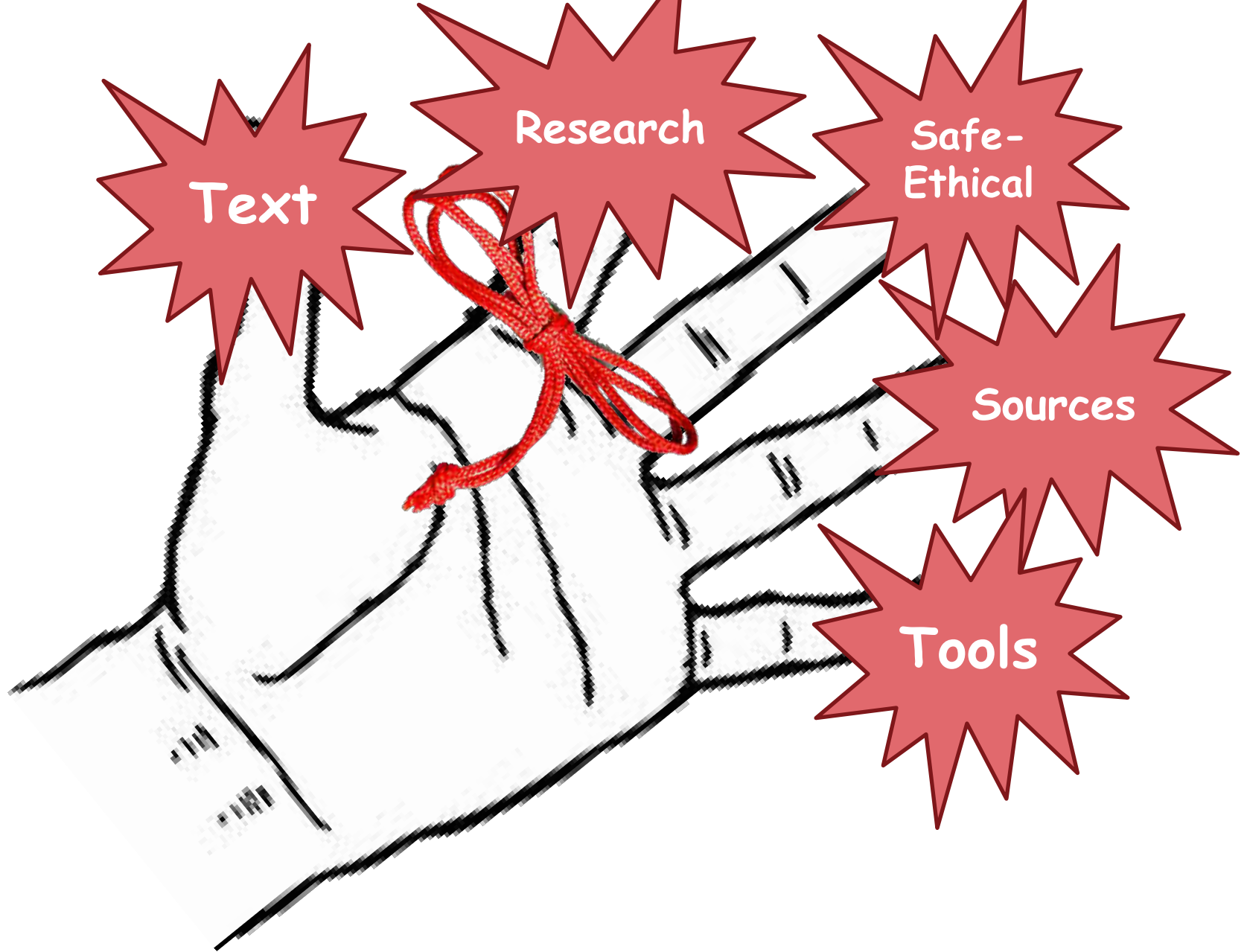
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Remember **SE** issues related to the responsible use of information and technology resources.

Understand **SE** issues related to the responsible use of information and technology resources.

Understand **SE** issues related to the safe, ethical, and responsible use of information and technology resources.







# Technology Tools



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Use **TT** and skills to reinforce classroom concepts and activities.

Use **TT** and skills to reinforce and extend classroom concepts and activities.

Use **TT** and other resources for the purpose of accessing, organizing, and sharing information.

Use **TT** and other resources for assigned tasks.



Opportunity?

or

Danger Ahead?

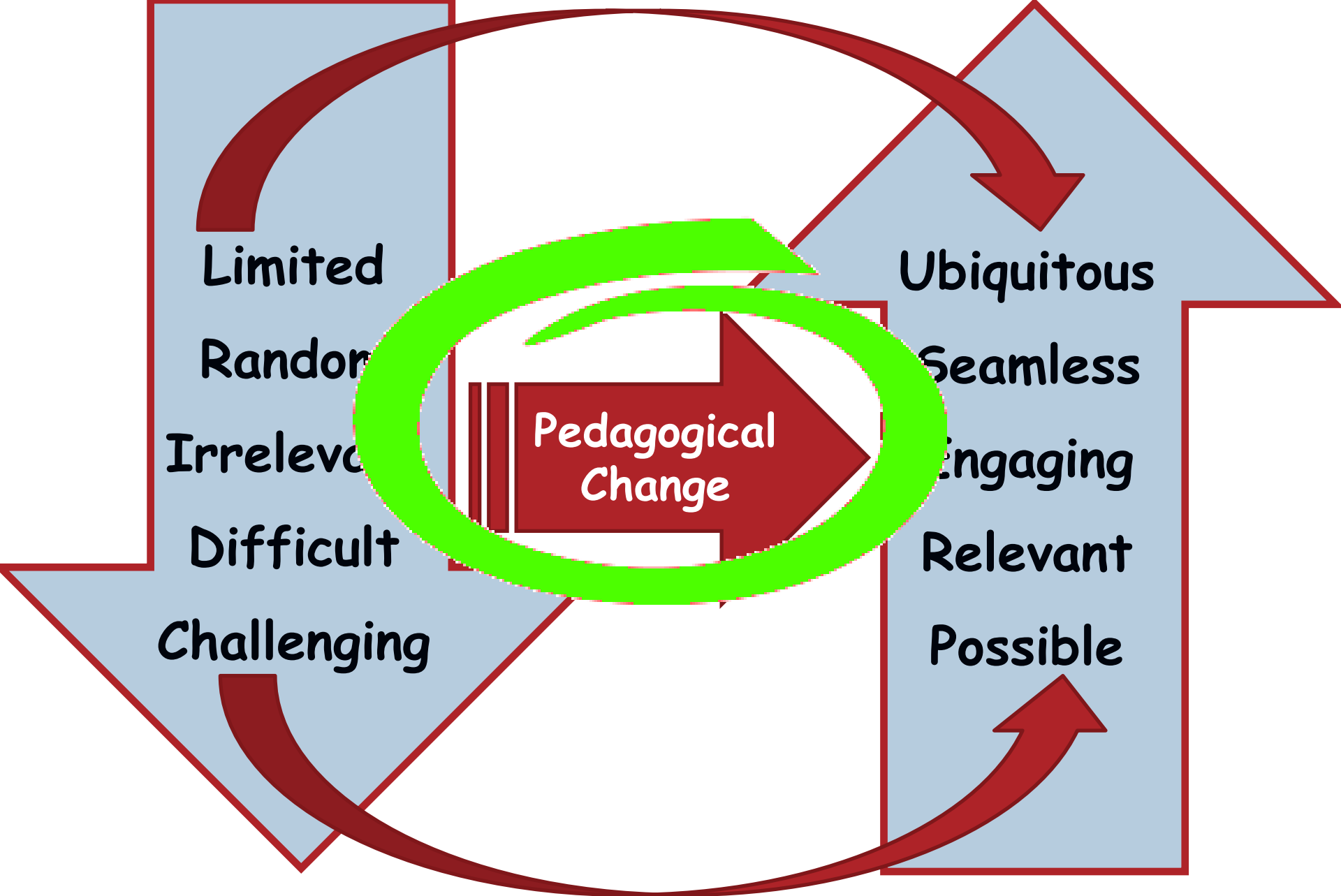


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# Pedagogical Change

Student Owned

Problem Solving

Differentiating

Data-Driven

Authentic

Reflective

Critical Thinking

Collaborative

Creative



WE ALL WANT AN A!!



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# ***Our Teaching Standards....***



**Standard 1: Teachers demonstrate leadership.**



**Standard 2: Teachers establish a respectful environment for a diverse population of students.**



**Standard 3: Teachers know the content they teach.**



**Standard 4: Teachers facilitate learning for their students.**



**Standard 5: Teachers reflect on their practice.**

# Focus...



**Standard 4: Teachers facilitate learning for their students.**

Teachers **integrate and utilize technology** in their instruction.

Teachers know when and how to use technology to **maximize student learning**.

- Know **appropriate use**
- Help students use technology to **learn content, think critically, solve problems, discern reliability, use information, communicate, innovate, and collaborate**

# Elements....



## Standard 4: Teachers facilitate learning for their students.

- A. Teachers know the **ways in which learning takes place**, and they know the appropriate levels of intellectual, physical, social, and emotional development of their students.
- B. Teachers plan instruction **appropriate** for their students.
- C. Teachers use **a variety** of instructional methods.
- D. Teachers **integrate and utilize technology** in their instruction.
- E. Teachers help students **develop critical thinking and problem-solving skills**.
- F. Teachers help students work in **teams and develop leadership qualities**.
- G. Teachers **communicate** effectively.
- H. Teachers use **a variety of methods** to assess what each student has learned



# Evidence



**Standard 4: Teachers facilitate learning for their students.**

- ✓ Lesson Plans
- ✓ Documentation of Differentiated Instruction
- ✓ Display of Technology Used
- ✓ Materials Used to Promote Critical Thinking and Problem Solving
- ✓ Professional Development
- ✓ Collaborative Lesson Planning
- ✓ Use of student learning teams



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# Fast Facts.....



**Standard 4: Teachers facilitate learning for their students.**



# Fast Facts.....



**Standard 4: Teachers facilitate learning for their students.**





# Fast Facts.....



**Standard 4: Teachers facilitate learning for their students.**



**in the/all  
classrooms**

# Fast Facts.....



**Standard 4: Teachers facilitate learning for their students.**



**Need to  
Collaborate-Media  
& Tech Facilitator**



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# Fast Facts.....



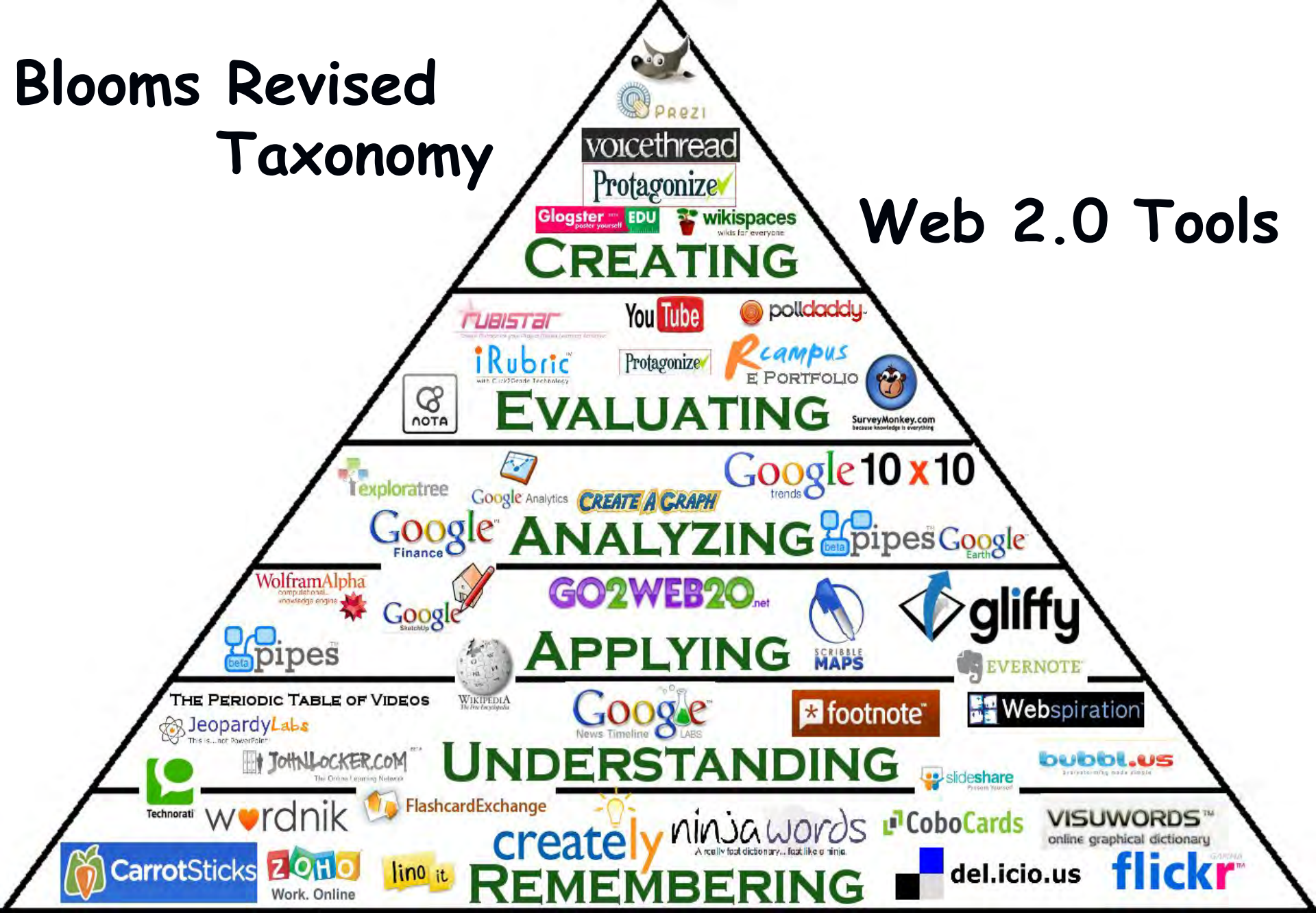
**Standard 4: Teachers facilitate learning for their students.**



**Variably Equipped  
Classrooms**

# Blooms Revised Taxonomy

# Web 2.0 Tools





chat  
blogging  
presentations  
graphs  
charts  
websites  
pictures  
screenrecorders  
wikis  
bookmarking  
whiteboards  
polling  
audio  
surveys  
**sharing**  
microblogging  
aggregators  
mapping  
editing  
portals  
authoring  
readers  
tagging  
video

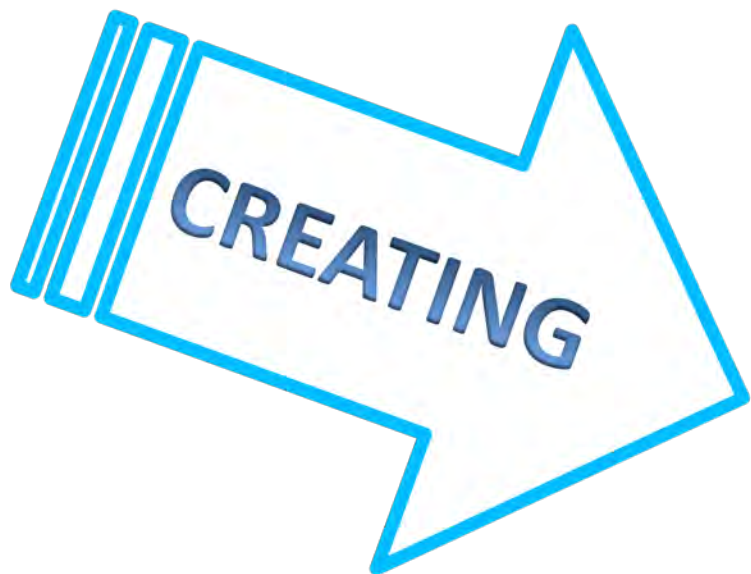


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remixing  
directing  
constructing  
filming videocasting  
blogging wiki  
mashups  
designing ing podcasting  
devising programming  
animating mixing  
publishing producing making  
inventing

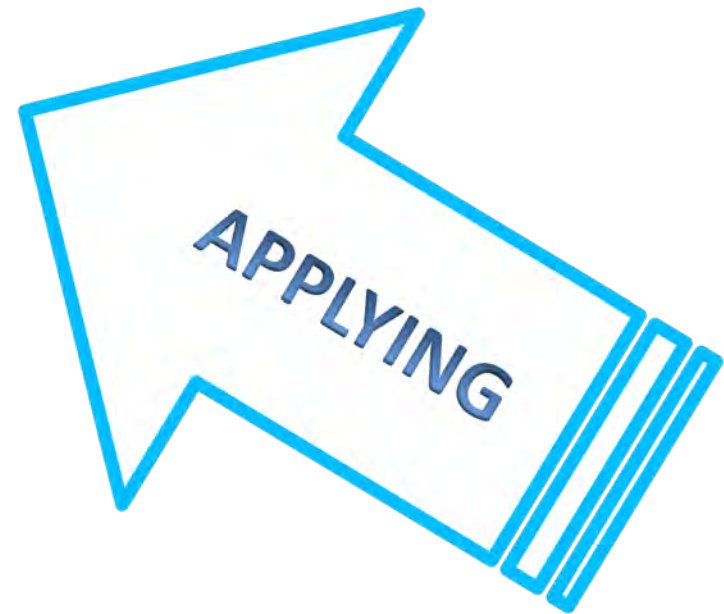


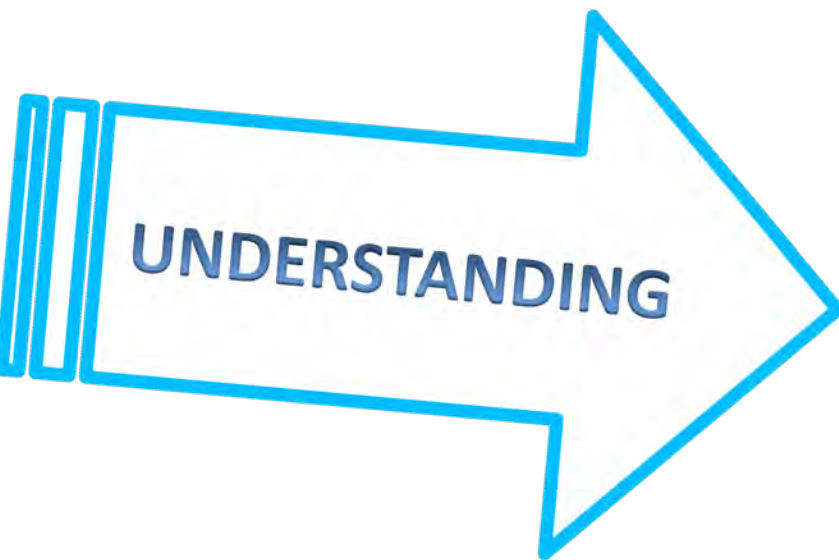


organizing  
mapping mashing  
deconstructing reverse  
integrating  
mind linking engineering  
finding outlining structuring  
comparing cracking



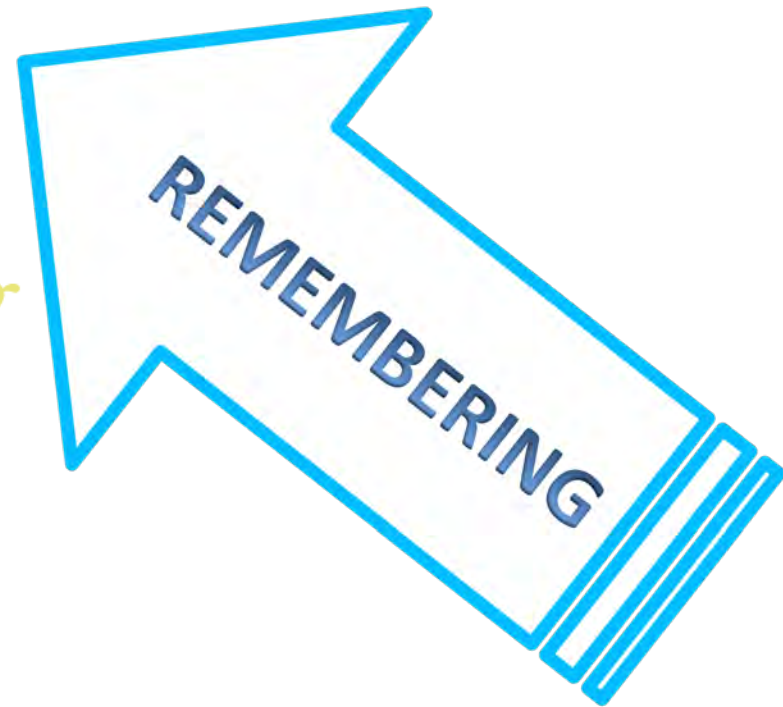
loading  
running  
operating  
executing  
implementing  
using  
playing  
hacking  
uploading  
editing  
out  
carrying  
sharing





annotating  
classifying  
blog  
comparing  
inferring  
commenting  
boolean  
summarizing  
paraphrasing  
categorizing  
journalling  
explaining  
exemplifying  
tagging  
subscribing  
interpreting  
searching

finding  
describing  
bookmarking  
identifying  
recognizing  
searching  
retrieving  
bulleting  
social  
locating  
googling  
highlighting  
listing  
networking  
naming



# Sample Resources by Strand

Created and maintained by Region 5 consultant, Ouida Myers

1. **SI** - [http://www.diigo.com/list/omyers/sources\\_of\\_information](http://www.diigo.com/list/omyers/sources_of_information)
2. **IT** - <http://www.diigo.com/list/omyers/informational-text>
3. **SE** - <http://www.diigo.com/list/omyers/safety-and-ethics>
4. **TT** - <http://www.diigo.com/list/omyers/technology-as-a-tool>
5. **RP** - <http://www.diigo.com/list/omyers/research-process>

Please keep in mind that resources are fluid and should be used only as examples so that teachers can get a picture of how and what to utilize.



# Credits

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- <http://www.bestphotos.us/>
- Library of Congress
- <http://www.alegriphotos.com/>
- <http://teamaltman.com>
- <http://www.itechnews.net> – University of Wisconsin
- Open source – API – Twitter, Google,